

IN THE CLAIMS

Please amend claims 1, 8, 26, and 27 as indicated below. The below listing of claims will replace all prior versions and listings of claims in the above-identified patent application:

1. (Currently amended) A heat-treated elongate member, comprising:
a composite elongate core;
the composite elongate core having a proximal section and distal section, each section formed in part of a precipitation hardened material and in part of a superelastic material;
a flexible body disposed at a distal end of the distal section;
wherein the precipitation hardened material and superelastic material extend from the proximal section to at least substantially, in a radial direction, underneath the flexible body.
2. (Original) The elongate member of claim 1 wherein the composite elongate core has a modulus of elasticity of at least 9×10^6 psi.
3. (Original) The elongate member of claim 2 wherein the modulus of elasticity is at least 12×10^6 psi.
4. (Original) The elongate member of claim 3 wherein the modulus of elasticity is at least 15×10^6 psi.
5. (Original) The elongate member of claim 1 wherein the composite elongate core has an ultimate tensile strength of at least 150 ksi.
6. (Original) The elongate member of claim 5 wherein the ultimate tensile strength is at least 180 ksi.

7. (Original) The elongate member of claim 6 wherein the ultimate tensile strength is at least 200 ksi.

8. (Currently amended) A heat-treated elongate member, comprising:
a composite elongate core;
the composite elongate core having a proximal section and distal section, each section formed in part of a precipitation hardened material and in part of a superelastic material;
a flexible body at least partially overlying the distal section;
the precipitation hardened material and superelastic material extending from the proximal section to substantially in a radial direction underneath the flexible body; and
wherein the precipitation hardenable material comprises at least two materials selected from the group consisting of nickel, cobalt, molybdenum, chromium, tungsten, and iron.

9. (Original) The elongate member of claim 8 wherein the precipitation hardenable material is precipitation hardenable stainless steel.

10. (Original) The elongate member of claim 9 wherein the precipitation hardenable material is chromium-nickel based single stage martensitic precipitation hardenable stainless steel.

11. (Original) The elongate member of claim 9 wherein the precipitation hardenable stainless steel is essentially nickel free.

12. (Original) The elongate member of claim 9 wherein the precipitation hardenable stainless steel includes less than about 1% nickel.

13. (Original) The elongate member of claim 8 wherein the precipitation hardenable material is a cobalt based precipitation hardenable alloy.

14. (Original) The elongate member of claim 13 wherein the cobalt based alloy further includes nickel, molybdenum and chromium.

15. (Original) The elongate member of claim 14 wherein the alloy further includes less than about 10% by wt. iron.

16. (Original) The elongate member of claim 8 wherein the composite elongate core has an inner core element and a first layer portion disposed at least in part about the inner core element, the inner core element and the first layer portion being formed from different material.

17. (Original) The elongate member of claim 16 wherein the inner core element and the first layer portion are independently formed from superelastic NITINOL and precipitation hardenable material.

18. (Original) The elongate member of claim 17 wherein the inner core element is formed from superelastic NITINOL.

19. (Original) The elongate member of claim 17 the first layer portion is formed from superelastic NITINOL.

20. (Original) The elongate member of claim 19 wherein the composite elongate core further includes a second layer portion disposed at least in part about the first layer portion and formed from a material similar to the inner core element material.

21. (Original) The elongate member of claim 18 wherein the composite elongate core further includes a second layer portion disposed at least in part about the first layer portion and formed from a material similar to core element material.

22. (Original) The elongate member of claim 18 wherein the elongate member is a guidewire.

23. (Original) The elongate member of claim 22 wherein the composite elongate core includes a distal segment having a distally tapered section with proximal and distal portions, and a distal flexible section, the inner core element being at least partially exposed at the distal flexible section of the distal segment of the composite elongate member.

24. (Original) The elongate member of claim 19 wherein the elongate member is a guidewire.

25. (Original) The elongate member of 24 wherein the composite elongate core includes a distal segment having a distally tapered section with proximal and distal portions, and a distal flexible section, the inner core element being at least partially exposed at the distal flexible section of the distal segment of the composite elongate member, and the first layer portion being at least substantially exposed at the proximal portion of the distally tapered section of the distal segment of the composite elongate core.

26. (Currently amended) A guide wire, comprising:
a composite elongate core;
the composite elongate core having a proximal section and distal section, each section formed in part of a precipitation hardened material and in part of a superelastic material;
a flexible coil disposed at a distal end of the distal section;
wherein the precipitation hardened material and superelastic material extend from the proximal section to substantially underneath in a radial direction relative to the flexible coil.

27. (Currently amended) A heat-treated elongate member, comprising:
a composite elongate core;
the composite elongate core having a proximal section and distal section, each section formed in part of a precipitation hardened material and in part of a superelastic material;
a flexible body disposed at a distal end of the distal section;
the distal section having a proximal portion and a tapered distal portion; and
wherein the precipitation hardened material and superelastic material extend from the proximal section of the elongate core to the tapered distal portion of the distal section of the elongate core and continuing to substantially, in a radial direction, underneath the flexible body.